

SYLLABUS

1. Course information

Course Code: INFT3136	Course Title : iOS Development		
Level : Undergraduate	Year : 3	Term: Fall	ECTS Credits : 3
Status: unknown	Hours per Week : 3 hours		Total Hours : 45
Form of Education : Online		Language of Instruction : English	
Course Instructor : Mr. Darkhan Kuanyshbay			
Office no. : F403	Tel (mob.) : +7 747 614 85 68	E m a i l : darkhan.kuanyshbay@sdu.edu.kz	
Office hours: Every Friday, 10:00 - 12:00			
Time and place of lessons: Please follow up the schedule of the classes			

2. Short description of the course

This course will give you the basic skills to develop iOS apps from scratch. You will be learning how to use MVC design paradigm to whatever app you'll be working on. Often used frameworks will be introduced during this course that allow you to design almost any project you can think of. Course starts with learning modern Swift programming language and finishes with Firebase integration to your application and distribution to the AppStore.

3. Pre-requisites

No	Course Code (if known)	Course Title / Topics to Know (if instructor is not sure whether relevant topics are have been covered in particular courses)
1		Algorithms and Programming
2		Object-Oriented Programming

4. Course Objectives (or Learning Outcomes)

As a result you'll be ready to work on any iOS projects with well-developed skills of designing MVC pattern. You can be an independent iOS developer and easily upload applications to the market.

5. Curriculum Plan (or Course Content or Weekly Distribution of Themes):

WEEK	DETAILED TOPICS	Assignment
1	Introduction to Swift basics (datatypes, loops, classes, optionals)	
2	Introduction to Xcode, MVC design paradigm	Assignment-1(Calculator) - 1 week
3	UITableViewControllers and Segues	Assignment-2(Contact Book) - 1 week
4	UIView, drawing on the View, Touch events	Assignment-3(Paint App) - 1 week
5	ViewController lifecycle and multiple MVC's	Assignment-4(Browser) - 1 week
6	Memory management, Extensions, UITextField	Assignment-5(SDU app) - 2 weeks

7	UIScrollView, Multithreading and queues	
8	Midterm Task(2 hours)	Documentation of final project assignment
9	MapView, CoreData introduction	Assignment-6(Places App) - 1 week
10	UIView animation, Custom Segue	Assignment-7(Animation App) - 1 week
11	Real time databases, Firebase	Assignment-8(Twitter App) - 1 week
12	Final project preparation	Final Project predefence
13	Final project preparation	Final Project predefence
14	Final Project demonstration	
15	Final Examination	

6. Recommended Resources

6a. Main Textbook(s):

Apple Inc., 2019, “The Swift Programming Language”

Matt Neuburg, 2018, Programming iOS 12

6b. Online Sources:

[youtube.com](https://www.youtube.com)

developer.apple.com

docs.swift.org

raywenderlich.com

[lynda.com](https://www.lynda.com)

[udemy.com](https://www.udemy.com)

7. Grading Policy

Assignments - **45%**

Midterm Task(2 hours) - **15%**

Final - **40%(Project + Exam)**

7a. There will be only coding tasks and exams. Almost no paper exam. You’ll be developing only your programming skills